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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL
FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number 09/775,106

Filing Date February 1, 2001

First Named Inventor Gerard A. Mourou

Art Unit 1725

Examiner Name Geoffrey S. Evans

Attorney Docket Number 2115D-000939/DVC

ENCLOSURES (check all that apply)					
Fee Transmittal F	orm	☐ Drawing(s)	- · · · · · · · · · · · · · · · · · · ·		r Allowance Communication to hnology Center (TC)
Fee Attached		Licensing-re	elated Papers		eal Communication to Board of eals and Interferences
Amendment / Reply		Petition			eal Communication to TC peal Notice, Brief, Reply Brief)
After Final		Petition to 0	Convert to a Application	☐ Prop	orietary Information
Affidavits/dec	laration(s)		ttorney, Revocation Correspondence Address	☐ Stat	us Letter
Extension of Time	e Request	Terminal Di	isclaimer		ner Enclosure(s) ase identify below):
Express Abandonment Request		Request for Refund  CD, Number of CD(s)		,	Check for \$180; HDP Form 1449 with & cited references attached; and return receipt postcard.
Information Disclo	sure Statement				
Certified Copy of Document(s)	Priority	Remarks		red under	thorized to charge any additional 37 CFR 1.16 or 1.17 to Deposit
Response to Miss				•	
	Response to Missing Parts under 37 CFR 1.52 or 1.53				
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT					
Firm <i>or</i> Individual name	or Harness, Dickey & F		Attorney Name Linda M. Deschere		Reg. No. 34,811
Signature	4				
Date	2				
Individual name Signature					

Typed or printed name Linda M. Deschere Express Mail Label No.

Signature Date 24 Nach 06

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450,

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Alexandria, VA 22313-1450 on the date shown below.

Approved for use through 07/31/2006, OMB 0651-0032 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

er the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Complete if Known oursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). 09/775,106 **Application Number** FEE TRANSMITTAL February 1, 2001 Filing Date for FY 2006 Gerad A. Mourou First Named Inventor Applicant claims small entity status. See 37 CFR 1.27 Examiner Name Geoffrey S. Evans Art Unit 1725 TOTAL AMOUNT OF PAYMENT (\$) 180 Attorney Docket No. 2115D-000939/DVC METHOD OF PAYMENT (check all that apply) ☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) : Deposit Account Deposit Account Number: Deposit Account Name: For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee

### **FEE CALCULATION**

information and authorization on PTO-2038.

1. BASIC FILING, SEARCH	I, AND EXAMINATION FEES
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Under 37 CFR 1.16 and 1.17

Charge any additional fee(s) or underpayments of fee(s)

	FILING F	EES	SEARCH	FEES	EXAMIN	ATION FEES	
	9	Small Entity		Small Entity		Small Entity	
Application Type	<u>Fee (\$)</u>	<u>Fee(\$)</u>	<u>Fee(\$)</u>	Fee(\$)	<u>Fee(\$)</u>	Fee(\$)	Fees Paid (\$)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card

Credit any overpayments

2. EXCESS CLAIM FEES

R. EXCESS CLAIM FEES		Small Entity
Fee Description	Fee (\$)	Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

**Total Claims Extra Claims** Multiple Dependent Claims Fee(\$) Fee Paid (\$) -20 or HP= Fee (\$) Fee Paid (\$) HP = highest number of total claims paid for, if greater than 20. Indep. Claims **Extra Claims** Fee(\$) Fee Paid (\$)

- 3 or HP= <u>0</u> HP = highest number of independent claims paid for, if greater than 3.

### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$) = 0 (round up to a whole number) x Fees Paid (\$)

### 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Information Disclosure Statement 180

SUBMITTED BY			
Signature		Registration No. (Attorney/Agent) 34,811	Telephone 144 248-641-1600
Name (Print/Type)	Linda M. Deschere		Date 24 Mouls 06

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

lication No.:

09/775,106

Filing Date:

February 1, 2001

Applicant:

Gerard A. Mourou et al.

Group Art Unit:

1725

Examiner:

Geoffrey S. Evans

Title:

METHOD FOR CONTROLLING CONFIGURATION OF LASER

INDUCED BREAKDOWN AND ABLATION

Attorney Docket:

2115D-000939/DVC

Director of the United States Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

#### I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:  U.S. Serial Number  U.S. Filing Date  C. This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)  CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)  A. Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).  B. A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):  1. See the attached foreign patent office communication from a counterpart foreign application:  2. English translations are provided:  See Form 1449: Abstract provided.  3. Other:  Identified by Examiner in related case 90/007,102.  C. The following additional information is provided for the Examiner's consideration.
C.  This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)  CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)  A.  Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).  B.  A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):  1.  See the attached foreign patent office communication from a counterpart foreign application:  2.  English translations are provided:  See Form 1449: Abstract provided.  3.  Other:  Identified by Examiner in related case 90/007,102.
States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)  CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)  A.  Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).  B.  A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):  1.  See the attached foreign patent office communication from a counterpart foreign application:  2.  English translations are provided:  See Form 1449: Abstract provided.  3.  Other:  Identified by Examiner in related case 90/007,102.  C.  The following additional information is provided for the Examiner's
States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search report are listed on the attached Form 1449 for consideration by the Examiner and for listing on any patent resulting from this application. If the International Search report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g).)  CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)  A.  Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).  B.  A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):  1.  See the attached foreign patent office communication from a counterpart foreign application:  2.  English translations are provided:  See Form 1449: Abstract provided.  3.  Other:  Identified by Examiner in related case 90/007,102.  C.  The following additional information is provided for the Examiner's
<ul> <li>A.  Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).</li> <li>B.  A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)): <ol> <li>See the attached foreign patent office communication from a counterpart foreign application:</li> <li>English translations are provided:</li> <li>See Form 1449: Abstract provided.</li> <li>Other:</li> <li>Identified by Examiner in related case 90/007,102.</li> </ol> </li> <li>C.  The following additional information is provided for the Examiner's</li> </ul>
other information are in the English language (concise explanation not required).  B. ⋈ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):  1. ☐ See the attached foreign patent office communication from a counterpart foreign application:  2. ☒ English translations are provided:  See Form 1449: Abstract provided.  3. ☒ Other:  Identified by Examiner in related case 90/007,102.  C. ☐ The following additional information is provided for the Examiner's
<ul> <li>information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):</li> <li>1. ☐ See the attached foreign patent office communication from a counterpart foreign application:</li> <li>2. ☒ English translations are provided:</li> <li>See Form 1449: Abstract provided.</li> <li>3. ☒ Other:</li> <li>Identified by Examiner in related case 90/007,102.</li> <li>C. ☐ The following additional information is provided for the Examiner's</li> </ul>
counterpart foreign application:  2. ☑ English translations are provided:  See Form 1449: Abstract provided.  3. ☑ Other:  Identified by Examiner in related case 90/007,102.  C. ☐ The following additional information is provided for the Examiner's
See Form 1449: Abstract provided.  3. ☑ Other:  Identified by Examiner in related case 90/007,102.  C. ☐ The following additional information is provided for the Examiner's
<ul> <li>3. ☑ Other:</li> <li>Identified by Examiner in related case 90/007,102.</li> <li>C. ☐ The following additional information is provided for the Examiner's</li> </ul>
Identified by Examiner in related case 90/007,102.  C.  The following additional information is provided for the Examiner's
C. The following additional information is provided for the Examiner's
C. The following additional information is provided for the Examiner's consideration.

ÎII.

# IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does (do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.	<u>Filing Date</u>	<u>Art Unit</u>
90/007,102	06/25/2004	1725
09/775,069	02/01/2001	1725

# V. THIS IDS IS BEING FILED UNDER

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A. 37 C.F.R. § 1.97(b): (check only one box)

- 1. within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
- 2. within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
- 3. before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
- 4. Defore the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

# B. **37 C.F.R. § 1.97(c):** (check <u>only</u> one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

- 1. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
- 2. 
  See the certification below. No fee is required.

	C. 37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1.  See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
VI.	CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
	The undersigned hereby certifies that:
	A.   each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)).   See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or
	B.  no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. 1.704(d)
•	The undersigned hereby states that:
•	each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

·....

#### VIII. PAYMENT OF FEES (check only one box)

- A. A check in the amount of \$180.00 is enclosed for the above identified fee.
- B. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: 24 Maril 06

Bv:

Linda M. Deschere

Rea. No. 34.811

Harness, Dickey & Pierce, P.L.C. P.O. Box 828

Bloomfield Hills, Michigan 48303

(248) 641-1600

LDES/mm

24 radios

## FORM HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE (Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET NO.	SERIAL NO.
2115D-000939/DVC	09/775,106
APPLICANT	
Gerard A. Mourou	
FILING DATE	GROUP
February 1, 2001	1725

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		JP 03216287 A	09/24/1991	Japan		Abstract	

OTHE	OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)					
Ref Desig.	Examiner's Initials					
1.		Mannion et al., "Ablation Thresholds in Ultrafast Laser Micro-Machining of Common Metals in Air, Proceedings of SPIE, Vol. 4876 (2003), pages 470-478.				
2.		S. Amoruso et al., "Characterization of Laser-Ablation Plasmas", J. Phys. B: At. Mol. Opt. Phys. 32 (1999) R131-R172, section 2.1.1.				
3.		Kautek et al., Laser Ablation of Dielectrics with Pulse Durations Between 20 fs and 3 ps, Appl. Phys. Lett. 69(21), November 18, 1996, pages 3146-3148.				
4.		J. Bonse et al., Ultrashort-Pulse Laser Ablation of Indium Phosphide in Air, Appl. Phys. A Volume 72, Issue 1, pages 89-94 (2001).				
5.		S. Preuss et al., Time Resolved Dynamics of Subpicosecond Laser Ablation, Appl. Phys. Lett, Vol. 62, No. 23, June 7, 1993.				
6.		Schwab et al., Femtosecond-Excimer-Laser Patterning of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> Films, Appl. Phys. A, Volume 53, (1991), pages 282-283.				
7.		Chen et al., Generation of Submicron Surface Gratings on LiNbO₃ by Ultrashort UV Laser Pulses, Appl. Phys. A, Volume 65, Pages 517-518 (1997).				

Examiner:	Date Considered: